

Remarks

The Office Action of June 10, 1999 has been fully considered by the Applicant. Applicant believes the present response addresses the issues raised by the Examiner in the Final rejection. In particular, this response includes a revised Declaration under 37 C.F.R. §1.131 which addresses the concerns raised by the Examiner in the Office Action of June 10, 1999. Specifically, the Examiner's attention is directed to paragraph no.'s 4-5 of the revised Declaration which identifies the golf balls disclosed in Table 1 (attached thereto) as "intermediate" golf balls. The Declaration also identifies that the intermediate golf balls of Table 1 as the intermediate golf balls shown in Table 7 of the application (paragraph no. 4). The Declaration further states that the intermediate golf balls of Table 1 (corresponding to those of Table 7 of the application) were used to prepare the final golf balls of Table 2, said final golf balls of Table 2 being those depicted in Table 8 of the application.

It is submitted that these revisions to the Declaration raise no new issues which require further consideration by the Examiner but are merely intended to address the concerns raised by the Examiner with respect to the original Declaration of April 22, 1999. Reconsideration of the application is therefore requested in view of the revised Declaration and the following comments.

The Office Action

Claims 1-8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Proudfit (U.S. Patent No. 5,314,187).

Separately, claims 1-6 stand provisionally rejected under the judicially created doctrine of double patenting over claims 1-8 of copending application No. 08/920,070. Similarly, claims 1-8 stand provisionally rejected under the judicially created doctrine of double patenting over claims 1-6 of copending application No. 08/870,585.

Rejection Under 35 U.S.C. §103

Claims 1-8 have been rejected under 35 U.S.C. §103(a) as being unpatentable over the '187 patent to Proudfit. Specifically, the Examiner relies on the reasoning provided in his previous actions which is as follows:

"Proudfit discloses the claimed invention with the exception of the particular hardness/specific gravity claimed. However, Proudfit discloses a hard inner cover and softer outer cover

formed from materials such as those disclosed by the applicant. Obviously the exact hardness of the layers would have been up to the ordinary skilled artisan depending on distance and feel considerations. Absent a showing of unexpected results, the particular parameters of Proudfit's ball, which is formed from the same materials in the same fashion claimed by the applicant, would have been obvious to one of ordinary skill in the art."

Applicant is of the opinion that the Examiner has not addressed, or has misinterpreted, material limitations present in the claims. Specifically, with respect to the parameters present in the claims concerning a specific gravity, thickness, and hardness, the Examiner has failed to provide a teaching of those particular parameters in combination for a golf ball. This is discussed in greater detail below.

The Present Invention and the Higuchi '852 Patent

The invention of this application (claims 1-8) is directed to improved multi-layer golf ball cover compositions and the resulting multi-layer golf balls produced thereby. More specifically, claims 1-8 of the present application cover the same patentable invention as claims 1-8 of Higuchi et al. (U.S. Patent No. 5,553,852), wherein Applicant has proposed declaring an interference between the present application and Higuchi et al. '852. (See Request for Interference file September 5, 1997.) Applicant notes that because the current claims 1-8 correspond to claims 1-8 of the Higuchi ('852) patent, section 2307.02 of the MPEP requires approval of the Group Director before rejecting the claims on art which would also be applicable to the Higuchi ('852) claims. It is noted that this has not been complied with. (See also MPEP §1003, No. 6, July 1998).

As noted in column 2, lines 3-40 of Higuchi et al. '852 patent, it has been found that by providing a relatively hard intermediate layer between a solid center core and the outer cover, and by controlling the size, specific gravity, and/or softness of the core, intermediate layer and outer cover layer, the center core and outer cover can be made relatively soft to improve feeling and controllability without deteriorating flying performance and durability. In this regard, Higuchi et al. '852 patent indicates:

Briefly stated, an intermediate layer having a thickness of at least 1 mm, a specific gravity of less than 1.2, and a

hardness of at least 85 on JIS C scale is formed around a center core having a diameter of at least 29 mm and a specific gravity of less than 1.4 and greater than the intermediate layer specific gravity. A cover having a thickness of 1 to 3 mm is formed on the outer surface of the intermediate layer to complete a solid golf ball. Then even when the center core is softened to a JIS C scale hardness of 45 to 80 and the cover softened to a JIS C scale hardness of 50 to 85, the feeling and controllability can be improved at no sacrifice of flying distance and durability. Further when the intermediate layer is formed of a resin composition based on a high repulsion ionomer resin, the hitting feel and controllability can be further improved with no sacrifice of flying distance and durability.

The present invention provides a three-piece solid golf ball comprising a center core, an intermediate layer, and cover wherein the center core has a diameter of at least 29 mm and a specific gravity of less than 1.4, the intermediate layer has a thickness of at least 1 mm, a specific gravity of less than 1.2, and a hardness of at least 85 on the JIS C scale. The cover has a thickness of 1 to 3 mm. The specific gravity of the intermediate layer is lower than the specific gravity of the center core. In one preferred embodiment, the intermediate layer is formed of a composition based on a high repulsion ionomer resin.

In addition, it has been found that golf balls having the particular construction, as set forth in the present application and in the claims, possess softer compression and higher spin rates than conventional golf balls. Furthermore, it has been discovered that use of a softer solid core and/or outer cover layer adds to the desirable "feel" and high spin rate while maintaining respectable resiliency.

Consequently, the overall combination of a core, intermediate or inner cover layer, and an outer cover layer having a certain size or thickness, specific gravity and softness results in a standard size or oversized golf ball having *enhanced resilience* (improved travel distance) and durability (i.e. cut resistance, etc.) characteristics while maintaining, and in many instances improving, the balls playability properties.

The Cited Art

The '187 patent to Proudfit teaches a two layer cover for a golf ball. The two layer cover comprises an inner layer which is molded over a core and an outer layer which is molded over the inner layer. No particular size specific gravity, softness, etc. of the core

is specified. As a matter of fact, the core may be either a solid or wound core of any specific gravity, softness, etc.

The inner cover layer is formed from a relatively hard, cut-resistant material such as ionomer resin, and the outer layer is formed from a relatively soft rubber material such as a natural balata (a type of polyisoprene), synthetic balata, natural rubber, polybutadiene, and polyoctenylene rubber. Preferably, the outer layer is a blend of balata and thermally cross linkable elastomer such as polybutadiene.

With respect to the inner cover layer, no specific thickness, specific gravity and hardness is specified. As the Examiner knows, the hardness of various ionomer resins can vary greatly from "hard" to "soft". (See for example, U.S. Patent No. 4,884,814). Moreover, no information is provided in Proudfit concerning the relationship of the specific gravity of the intermediate layer and the core (whether solid or wound). Similar analysis can also be said with respect to the relationship of the specific gravity of the outer cover layer, the intermediate layer and the core (whether solid or wound).

Proudfit (U.S. 5,314,187) Fails to Qualify as Prior Art In View of the

Declaration Under 37 C.F.R. §1.131

As indicated in the previous response of April 22, 1999, the Proudfit reference can be removed as a valid prior art reference through the submission of a Declaration under 37 C.F.R. §1.131. More particularly, while the Proudfit application, which resulted the '187 patent, was filed on June 29, 1992, it was previously believed that the effective filing date of the subject matter of this application dated back to July 26, 1991. This is a result of the fact that the application filed June 29, 1992 was a continuation-in-part of an original parent application (i.e. Serial No. 733,789) that was filed on July 26, 1991 and subsequently abandoned.

However, upon review of the file wrapper history of Proudfit parent application Serial No. 733,789 (filed July 26, 1991), it became apparent that the subject matter concerning multi-layer covers now being relied upon by the Examiner in his outstanding rejection was actually introduced into the second Proudfit application, Serial No. 905,895, filed on June 29, 1992. The filing date of the second or C-I-P application is less than one year prior to the effective filing date of the present application of June 1, 1993 and it is long after Applicant's invention date.

As a result, the effective filing date for the Proudfit ('187), insofar as Proudfit is being relied upon by the Examiner, is June 29, 1992. This is less than one year prior to the effective filing date of the present application. Hence, Applicant can now establish, through the enclosed Declaration under 37 C.F.R. §1.131, that Applicant had reduced the invention of the present application to practice prior to the effective filing date of Proudfit ('187) of June 29, 1992.

Along these lines, 37 C.F.R. §1.131 allows the removal of a reference as prior art through the submission of an Affidavit or Declaration showing that the applicant had previously reduced the invention to practice before the effective filing date of the application which resulted in the prior art reference if the prior art reference has an effective filing date of less than one year prior to the filing date of the pending application. If this occurs, the reference can be removed as prior art by the Applicant showing that he or she had already actually reduced the invention to practice in the U.S. before the filing date of the referenced patent.

In view of the above, on April 22, 1999, Applicant submitted a Declaration under 37 C.F.R. §1.131, that he (Michael J. Sullivan) invented the subject matter sought to be patented prior to the effective filing date of Proudfit ('187) of June 29, 1992. In support thereof, Applicant attached to the Declaration evidence to support the declarative statement that the invention disclosed in the present application was completed prior to June 29, 1992.

In reviewing the Declaration of April 22, 1999, the Examiner indicated that the Declaration was ineffective to overcome the Proudfit reference as prior art.

In the Final rejection, the Examiner provides the following reasons for finding the Declaration ineffective to antedate Proudfit:

"Analysis of the evidence provided does not indicate that applicant had reduced the invention to practice. An examination of table 7 does not indicate that the materials recited are intended as "inner cover compositions". The materials recited could just as easily be intended as outer cover compositions or one-piece ball compositions and the properties recited, those of finished golf balls. The general accompanying statement in the declaration provides no further details in this regard.

Even if one assumes *arguendo* that table 1 shows intermediate golf balls and their properties with inner cover compositions, there is no evidence that such "inner cover"

layers were put together with outer cover layers in Table 2 to show the completed golf ball invention of the invention. If one assumes that the 61-1 - 61-5 labels of table 1 are the same as those of table 2, (and there is no statement to this effect) the conclusion one would draw is that 61-1 - 61-5 are core compositions for balls 1-4 and 8 of table 2. The designation given to these labels is "core" not "inner core". In the golf ball art there is obviously a great difference between the two terms.

Because only a general statement regarding the exhibits is provided, and the exhibits themselves do support the applicant's contention in the declaration as explained above, it is the examiner's opinion that the 37 C.F.R. 1.131 declaration is not effective to antedate the Proudfit reference."

While the Applicant does not necessarily agree with the Examiner regarding the sufficiency of the Declaration of April 22, 1999, Applicant's are submitting herewith a new Declaration under 37 C.F.R. §1.131 to address the alleged deficiencies raised by the Examiner.

Specifically, the Declaration, in paragraph no. 4, indicates that the blends shown in the attached Table 1 (which corresponds to Table 7 of the 08/926,246 application) represent various inner cover blends according to the invention. As indicated in the previous response, Table 1 of the attached Declaration is the same as that shown in the present application as Table 7. (See pages 41 and 42 of the present specification). The only difference between attached Table 1 and Table 7 of the application is that Table 1 uses reference numbers "61-1" to "61-5" to identify examples while Table 7 uses reference letters "A" - "E". As it is noted in the specification, compositions "A" (61-1), "B" (61-2) and "C" (61-3) are for high acid intermediate balls of the invention of the present application. Composition "D" (61-4) is a hard, low acid intermediate ball.

Additionally, the newly submitted Declaration indicates that the intermediate balls of the attached Table 1 were ground down and covered with a soft outer layer to form the balls of Table 2, also attached to the Declaration (see paragraph no.'s 6-9). The Declaration specifically indicates that the balls of Table 1, designated as 61-1 through 61-5 are the same as those in Table 2 using those same identifiers.

As indicated in the previous Declaration, Table 2 of the attached Declaration is also replicated in the present application, in part, by Table 8, as shown on page 44 of the present application's specification. As can be seen from Table 2, example 1 utilizes the Table

recognize or provide motivation for the unexpected enhanced durability of the claimed balls while retaining desirable properties relating to feel, control and distance.

Provisional Double Patenting Rejections

Claims 1-6 have been provisionally rejected over claims 1-8 of copending U.S. Application No. 08/920,070. Additionally, claims 1-8 have been provisionally rejected over claims 1-6 of copending U.S. Application No. 08/870,585.

Applicant is of the opinion that the instant application's claims are not exactly the same as the claims of each of 08/920,070 and 08/870,585. However, upon indication of allowable subject matter, Applicants will provide a Terminal Disclaimer, if required and appropriate, to overcome the double patenting rejections.

At this time Applicant believes no Terminal Disclaimer is necessary as no allowable subject matter has been indicated in this or the copending applications.

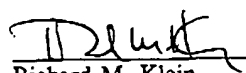
In addition, Applicant requests, should the present application now be in condition for allowability, that the Examiner withdraw the provisional obviousness type double patenting rejection and allow the present application to be identified as allowable as per MPEP §804.

Conclusion

In view of the above comments, it is believed that this application is in condition for allowance. Therefore, the Applicant respectfully requests favorable reconsideration and the initiation of Interference proceedings with Higuchi '852 patent. Should any issues remain, the Examiner is encouraged to contact the undersigned attorney in order to resolve any such issues.

Respectfully submitted,

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